

Claims

1. A radial osteogenic distractor device comprising a stationary member (1) and at least one translating member (2, 2'), the at least one translating member (2; 2') being slidable within at least one inner lateral channel (10; 21, 22) of the stationary member (1), both the stationary and translating members (1, 2; 2') being provided with respective fixation holes (3) for fixation to an underlying bone, wherein means (5, 8, 12, 13) are provided at an inner edge of the at least one translating member (2, 2') which is opposite to a lateral edge (6) of the at least one translating member (2, 2') facing the at least one channel (10; 21, 22) of the stationary member (1) to displace the at least one translating member (2, 2') within the at least one channel (10; 21, 22) in respect to the stationary member (1).

2. The device according to claim 1 wherein the displacing means (5, 8, 12, 13) comprises a pinion gear (13) provided on a retaining shaft (8) attached to the stationary member (1) and extending through a recess (7) of the translating member (2, 2') to engage respective indentation (5, 5') provided at the inner edge of the at least one translating member (2, 2').

3. The device according to claims 1 or 2 wherein the translating member (2, 2') is formed of a single member (2), the single member (2) being of curvilinear shape, the single member (2) including lateral edges (6) which are shaped to fit into the curvilinear inner lateral channels (10) of the stationary member (1).

4. The device according to claims 2 or 3 wherein the indentation (5) provided at one inner edge only of the recess (7).

5. The device according to claims 1 or 2 wherein the translating member (2, 2') is formed of two members (2'), each member (2') having respective indentations (5') at the inner edge thereof, each member (2') including a respective lateral edge (6) which is shaped to fit into a respective inner lateral channel (21, 22) of the stationary member (1).

6. The device according to one or more of claims 1-5 wherein the displacing means (5, 8, 12, 13) further include an actuator knob (12) to which the pinion gear (13) is attached.

7. The device according to claim 6 wherein the actuator knob (12) is provided with at least one opening (14) which is sized to accommodate a stationary pin (11) positioned perpen-

dicularly to and integral with the stationary member (1), such as to lock the actuator knob (12) in a fixed position.

8. The device according to one or more of claims 2-7 wherein the retaining shaft (8) has a collar or head (15) which restricts its movement through an opening (9) of the stationary member (1) and wherein a spring detent (16) is interposed between the head (15) and the stationary member (1).

9. The device according to claim 8 wherein the spring detent (16) is devised to cooperate with the retaining shaft (8) to hold the actuator knob (12) when the retaining shaft (8) is threadingly engaged with the actuator knob (12) and wherein the spring detent (16) is preferably in the shape of an O-ring or a washer.

10. The device according to one or more of claims 1-9 wherein the channels (10; 21, 22) are dovetail shaped and extend through the entire length of the of the stationary member (1).